Table 3-3

Monitoring Well Construction Summary
Range 24 Lower, Parcel 81Q
Fort McClellan, Calhoun County, Alabama

Well Location	Northing	Easting	Ground Elevation (ft amsl)	TOC Elevation (ft amsl)	Well Depth (ft bgs)	Screen Length (ft)	Screen Interval (ft bgs)	Well Material
HR-81Q-MW01	1170629.65	681864.58	994.93	996.89	33.5	15	18.5 - 33.5	2" ID Sch. 40 PVC
HR-81Q-MW02	1170872.58	681983.47	1006.76	1009.24	13.5	10	3.5 - 13.5	2" ID Sch. 40 PVC

Permanent wells installed using hollow-stem auger.
Horizontal coordinates referenced to the U.S. State Plane Coordinate System, Alabama East Zone, North American Datum of 1983 (NAD83).
Elevations referenced to the North American Vertical Datum of 1988 (NAVD88).
2" ID Sch. 40 PVC - 2-inch inside diameter, Schedule 40, polyvinyl chloride.
amsl - Above mean sea level.
bgs - Below ground surface.
ft - Feet.

Table 3-4

Groundwater Elevations
Range 24 Lower, Parcel 81Q
Fort McClellan, Calhoun County, Alabama

Well Location	Date	Depth to Water (ft BTOC)	Top of Casing Elevation (ft amsl)	Ground Elevation (ft amsl)	Groundwater Elevation (ft amsl)
HR-81Q-MW01	9-Jan-02	15.75	1009.24	1006.76	993.49
HR-81Q-MW02	9-Jan-02	16.68	996.89	994.93	980.21
BK-G08	8-Jan-02	13.54	969.64[a]	966.95[a]	956.10

Elevations referenced to the North American Vertical Datum of 1988 (NAVD88).

[a] Elevations surveyed by SAIC.
amsl - Above mean sea level.
BTOC - Below top of casing.
ft - Feet.

Table 3-5

Groundwater Sample Designations and Analytical Parameters
Range 24 Lower, Parcel 81Q
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	QA/QC Samples		Analytical Suite
		Field Duplicates	MS/MSD	
HR-81Q-MW01(W)	HR-81Q-MW01-GW-QD3001-REG		HR-81Q-MW01-GW-QD3001-MS/MSD	TAL Metals and Explosives
HR-81Q-MW02(W)	HR-81Q-MW02-GW-QD3002-REG			TAL Metals and Explosives
BK-G08	HR-81Q-BK-G08-GW-QD3004-REG			TAL Metals and Explosives

MS/MSD - Matrix spike/matrix spike duplicate.
QA/QC - Quality assurance/quality control.
REG - Field sample.
TAL - Target analyte list.

Table 3-6

Groundwater and Surface Water Field Parameters
Range 24 Lower, Parcel 81Q
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Media	Sample Date	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Temperature (°C)	Turbidity (NTU)	pH (SU)
HR-81Q-MW01	GW	8-Aug-01	0.051	3.39	52	24.9	1.8	5.81
HR-81Q-MW02	GW	8-Aug-01	0.044	8.94	198	20.3	0.8	5.70
BK-G08	GW	12-Jul-01	0.148	3.40	170	34.8	430	7.18
HR-81Q-SW/SD01	SW	27-Aug-01	0.044	6.14	140	22.4	10	5.52

°C - Degrees Celsius.
GW - Groundwater.
mg/L - Milligrams per liter.
mS/cm - Millisiemens per centimeter.
mV - Millivolts.
NTU - Nephelometric turbidity units.
ORP - Oxidation-reduction potential.
SU - Standard units.
SW - Surface Water.

Table 3-7

Surface Water and Sediment Sample Designations and Analytical Parameters
Range 24 Lower, Parcel 81Q
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	Sample Matrix	QA/QC Samples		Analytical Suite
			Field Duplicates	MS/MSD	
HR-81Q-SW/SD01	HR-81Q-SW/SD01-SW-QD2001-REG	Surface Water			TAL Metals and Explosives (TOC, Grain Size for sediment only)
	HR-81Q-SW/SD01-SD-QD1001-REG	Sediment		HR-81Q-SW/SD01-SD-QD1001-MS/MSD	

MS/MSD - Matrix spike/matrix spike duplicate.
NA - Not applicable.
QA/QC - Quality assurance/quality control.
REG - Field sample.
TAL - Target analyte list.
TOC - Total organic carbon.

Table 3-8

Variances to the Site-Specific Field Sampling Plan
Range 24 Lower, Parcel 81Q
Fort McClellan, Calhoun County, Alabama

Variance to the SFSP	Justification for Variance	Impact to Site Investigation
Permanent residuum monitoring well HR-81Q-MW01 was moved approximately 128 feet southwest of direct-push soil boring location HR-81Q-MW01.	The monitoring well was not installed at the proposed location because competent bedrock was encountered prior to reaching groundwater. Three attempts were made to install the well, but auger refusal was encountered at depths ranging from 3 feet bls to 6.5 feet bls and groundwater was not present. Therefore, a decision was made to move the well approximately 128 feet southwest of the direct push soil boring location HR-81Q-MW01. Groundwater was encountered at approximately 4.5 feet bls and the well successfully installed.	None.
Permanent residuum monitoring well HR-81Q-MW02 was moved approximately 110 feet east of direct-push soil boring location HR-81Q-MW02.	The monitoring well was not installed at the proposed location because competent bedrock was encountered prior to reaching groundwater. Several attempts were made to install the well, but auger refusal was encountered at depths ranging from 19 feet bls to 41 feet bls and groundwater was not present. Therefore, a decision was made to move the well approximately 110 feet east of the direct-push soil boring location HR-81Q-MW02. Groundwater was encountered at approximately 26.5 feet bls and the well successfully installed.	None.
Permanent residuum monitoring well HR-81Q-MW03 was not installed and a groundwater sample was not collected.	The monitoring well was not installed at the proposed location because competent bedrock was encountered prior to reaching groundwater. Several attempts were made to install the well, but competent bedrock was encountered at depths ranging from 55 feet bls to 69 feet bls and groundwater was not present.	None. Groundwater sample was collected from existing SAIC well BK-G08 to provide additional groundwater data.
Surface water and sediment samples at locations HR-81Q-SW/SD02 and HR-81Q-SW/SD03 were not collected.	The samples were not collected because surface water and sediment were not present in the drainage ditch. Several attempts were made to collect the samples, but all attempts were unsuccessful. Therefore, depositional soil samples HR-81Q-DEP01 and HR-81Q-DEP02 were collected at these locations.	None. Data from the depositional soil samples will be used to characterize the site.
The SFSP proposed collection of surface and subsurface soil adjacent to a mound located due east of Parcel 81`Q. However, the sample location (HR-81Q-GP03) was moved approximately 400 feet north of the proposed location, near another small mound located northeast of the site.	The soil samples were inadvertently collected at the mound located northeast of the site.	None. Data from the depositional soil sample HR-81Q-GP01 were used to determine the presence or absence of potential site-specific chemicals in soils near the original mound.

bls - below land surface.
SFSP - Site-Specific Field Sampling Plan.